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ABSTRACT

Online or distributed learning is becoming an increasingly popular method of delivering higher education. In this paper, the effectiveness of online teaching using a virtual classroom environment is examined. Also examined are techniques that college professors can use to make their students feel involved in the class as a community. An example of an online course offered at a corporation during the Summer of 1997 is described. An informal survey of the seventeen student participants revealed that all but one of them enjoyed the online course format. The majority of students cited convenience and flexibility as advantages of the course; major disadvantages were lack of oral communication in class discussions. (AEF)

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ED 412 934

EDUCATING ONLINE:
CREATING THE VIRTUAL CLASSROOM COMMUNITY

Program Description: A paper designed to illustrate and discuss the desirability of creating a sense of community within an online course in order for the faculty member and students to achieve an optimal teaching and learning experience. The author provides suggestions for strategic planning in order to achieve this goal.

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EDUCATING ONLINE:
CREATING THE VIRTUAL CLASSROOM COMMUNITY

INTRODUCTION

Online or distributed learning is becoming an increasingly popular method of delivering higher education. Just a few short years ago, the term "distance education" or "distance learning" was unknown in higher education circles in the United States. Now, consortiums of states are working together to provide "virtual" education to their populations. Entire "virtual" universities, such as the Western Governor's Virtual University and Kentucky's new Commonwealth Virtual University, are springing up. Not only will the populations in those states benefit from improved access to higher education but the concept of "service areas" for universities will rapidly become outdated as the online delivery method for higher education makes a university's service area global in nature. Universities are establishing entire degree programs to be delivered within a virtual environment where a student may be able to obtain a degree without ever visiting the physical, brick-and-mortar campus of the university that they are attending. As a result, professors teaching in the virtual or online environment struggle to offer the best possible educational product to the students in their classes. Both empirical [McCollum, 1997] and anecdotal evidence suggests that online learning is an effective delivery method for education. Studies such as the McCollum study even suggest that, perhaps, online learning is a superior method of delivering higher education. The article, and other evidence, indicates that, in order for the online delivery method to be effective, the students must feel involved in the course, with the other students, and with the professor in order to succeed. McCollum, 1997 found that a statistics class taught online outperformed the same class taught in a traditional classroom and that the, in the absence of the professor, the students formed study groups and felt a sense of the class as a community.

In this paper, I will examine the effectiveness of online teaching using a virtual classroom environment. I will also look at techniques that college professors can use to make their students feel involved in the class as a community and why this is an issue with which administrators and faculty must deal. A virtual learning community is

desirable in order to have a successful online learning program that delivers a quality product to satisfied students.

THE CLASSROOM AS A COMMUNITY

In the experience of many, and perhaps most, college faculty members, our classes are taught within a traditional classroom environment where lectures are delivered by the professor and notes are taken by the students in the classroom audience. The students are sitting in front of us with pen and paper in hand. We use a variety of teaching techniques in order to deliver the educational product for which they are paying. The students feel involved with the professor because they can see and hear the professor talk to them about the subject matter. The students feel involved with each other for the same reasons - and generally because the professor gives them projects on which they must work in groups. The students feel involved with the class because they have to be in a certain building and in a certain room at a designated time on particular days of the week. We, as college faculty, don't have to do very much to involve our students in the class we are teaching. They are involved by default - simply because they are there and can see and hear each other, along with the professor. Based partly on the discipline we are teaching, we can and do develop activities for our students to further involve them in the class. Regardless of that, however, they are members of a traditional class meeting in a synchronous time frame. Unfortunately, the students are often passive participants in their education rather than active learners.

As we use more and more electronic communications techniques in our courses, such as email and the World Wide Web, we move our classes along what can be viewed as a continuum. This continuum can be envisioned as having traditional classroom environments at one end and distance learning classroom environments at the other end - with lots of combinations in between. As we move toward distance learning delivery methods and away from traditional learning delivery methods, we ask ourselves how we can keep our students interested and involved in a class outside the traditional classroom environment. Distance learning delivery methods enables us to create a true "classroom without walls" where students may not be together with each other or with the professor

at the same time and same place. In other words, we develop a learning environment that has nothing to do with time and place and everything to do with collaboration, active learning on the part of the student, and course content and delivery. The online environment takes advantage of interactive and collaborative technologies to reach beyond the brick and mortar walls of the traditional classroom.

We should remember, however, that the traditional, or local, learning environment and the online learning environment cannot exist without each other. Without the online environment, local or traditional environments become outdated and stale. On the other hand, without the traditional or local environment, the online environment becomes disconnected and unreachable. One can and should augment, not replace, the other. [Ryder and Wilson, 1995].

THE ONLINE CLASSROOM

When a college faculty member makes the transition from a traditional classroom learning environment to a "virtual" or online learning environment, many adjustments have to be made. First, a "location" for the online class should be developed. This location can be in the form of a self-developed web page for the class or the professor can use a commercially developed software package. The professor then should decide which online communications techniques he/she wants to use for the class. In addition to a website, the professor may want to establish a newsgroup or mailing list composed of class members. This will enable the professor to make announcements to the students, serve as a backup in case the website is down, and create a feeling of community among the students who are subscribed to the newsgroup or mailing list. The professor, however, should make it clear to the students that they may contact him/her using private email as well as on the mailing list or website. Generally, it is a good idea to use private email for issues concerning grades, comments on coursework, and other individual matters. The professor may also want to consider using chat software as a part of the course. Perhaps groups of students want to meet in real-time, but in a virtual environment, and discuss course material or projects. Perhaps a student would like to talk to the professor in real-time - but can't come to campus. These are examples of situations where chat software is useful in an online class.

The online environment for the class, regardless of the electronic communications tools used, should be composed of three characteristics: socialization, active participation, and collaboration. The online class can be effective if the professor keeps these three factors in mind.

Socialization is particularly important in an online class. The environment lends itself to a feeling of isolation by the student - isolation from the professor as well as from other students. There is no brick and mortar building to go to at a designated time. Instead, the student is sitting, perhaps alone, at a computer in a lab, at home, or at work. This can foster a feeling of isolation unless active steps are taken by the professor to be sure the students are not feeling isolated. The professor should make initial contact with each student in the class in order to get student contact information. If the professor spends a little time the first few days of class talking with each student and helping them with individual problems, those students will feel more connected to the professor and to the class as the term continues. The professor can ease the transition on the part of the student from traditional classroom to online classroom by working with the student on any software or hardware problems the student may have, by referring the student to service and technical support personnel on campus, and by orienting the student to the demands of the online class, in general, and the individual class specifically. [Berge, 1995]

One useful technique the professor may want to use to increase socialization in the online class is to ask the students to post short, individual biographies to either the class mailing list/newsgroup or website. In that way, the students begin to get to know each other and will start to feel comfortable and "not alone" in the course. The professor will also want to ask the students to send, by private email, contact information including name, address, phone numbers, email addresses, fax numbers, and so on.

The University of Colorado in Denver has created an electronic student union in order for online students to be able to take advantage of the conveniences available to traditional students on campus. [The Chronicle of Higher Education, 1997]. Students can pay tuition bills, receive academic counseling, and locate and order library resources online.

Active participation is the second characteristic that an effective online class will have. In a traditional, lecture-only class, for example, students sit in class, take notes, and occasionally participate. In an online class, students have to participate to stay in class! They, for example, have to log on to the computer, pick up lectures and messages, talk with their groups, and other activities. Passive students must quickly become active students to succeed in an online class! Some students resent this requirement of activity as they are used to a more traditional form of teaching. They may feel like the professor is placing too much of the burden of the work on them. However, by the end of the online class, the students will invariably say that it has been more work than a traditional class. Part of the reason for this sentiment is because they've had to be more active though they haven't necessarily had to work harder. In an online class, students who are shy and uncommunicative in a traditional setting may feel more comfortable jumping into a discussion. No one is there to look at them or to criticize them face to face. In an online class, participation in class discussions can be very constructive - students have to type out what they want to say and review it rather than making statements in class they haven't had time to think about. The more participation in class discussions in an online class, the better the class will become - much like a traditional class!

Another positive aspect of active participation is the necessity of writing (typing) email messages, comments on class discussions, group projects, homework assignments, and other coursework. Students develop improved writing skills that will aid them in other courses as well as in future jobs and in life.

The third characteristic essential to an online class is collaboration. McCollum [1997] found that his students formed study groups on their own in the absence of the professor. Literature in the education field shows that group interaction and participation is an important part of the teaching/learning process in higher education. The professor collaborates with students in order to assist them in utilizing the vast resources of the World Wide Web as well as the educational databases available on the Internet. The online environment is a good fit for group interaction. Group projects are an effective way to facilitate socialization and collaboration in the online class. Students in this type of environment can learn a lot from each other. There are no preconceived notions about the others in the class. In the online environment, the students literally may not know the

sex, age, race, ethnic origin, etc. of other students. This tends to help break down the barriers between students. Disabled students can participate on equal footing without other students even being aware of a disability. Since the students may be from literally anywhere in the world and still be able to participate in an online class, the natural cultural diversity in such a class may enhance the learning environment. Students involved in group projects do not have to physically get together in the same place at the same time. They can communicate via email or they can use chat software, provided by the instructor, to "meet" in a virtual environment at the same time, but not at the same place.

AN EXAMPLE OF AN ONLINE COURSE

For a seven-week period during Summer 1997, I taught an online course to a cohort group at a local corporation. These students are going through a graduate program in lock-step with a schedule designed with their needs in mind. The students entered this online course with no knowledge of what to expect and with varying degrees of computer skills. A website was set up for the course and for class discussion.

At the end of the class, I gave the students an informal and anonymous survey of their likes and dislikes of the online course. Sixteen out of seventeen students enjoyed the online course format with one student who did not enjoy the format. The majority of students cited convenience and flexibility as advantages of the online course for them. This is supported by the fact that the second most popular time for the students to access the course website and course material was 10 p.m. at night. Off-hours were defined as 9 p.m. through 8 a.m. each day since these are hours in which traditional courses are not taught. These off-hours accounted for 25.72% of total student traffic. The student's lunch hour (12 noon) accounted for about 8% of total student traffic. Off-days were defined as weekends and accounted for 13% of total student traffic with the remainder of the student traffic spread almost equally among the weekdays.

The students cited the major disadvantage of the online course as the lack of oral communication in class discussions. The majority of them, however, said the advantages definitely outweighed the disadvantages of the online delivery method. According to the distance learning literature, the reason that online courses are desirable and successful is,

for one, because the online course can be asynchronous. In other words, the students and instructor don't have to be in the same place (a classroom, for example) at the same time (an appointed class time). This class did, however, allow for interaction between students or between students and the instructor through the virtual chat room when such interaction was desired.

The statistical analysis of the class also showed that the students were very actively involved in the course. There were 3,098 "hits" to the website for the seven-week period with students averaging over 100 hits each. Material such as lectures, assignments, course information, information on using the Internet, links to related material on the Web, and announcements were available on the website. In addition, the website was used for class discussion with students being required to participate as part of their grade. The students averaged approximately seven messages each as responses to class discussion questions. In other words, they each participated in the discussion each of the seven weeks of the class. Over 14% of the total hits to the website were to the discussion boards.

Groups did work together in this class. However, since most of the cohort group was employed at the same organization, analysis of group interaction and collaboration would be skewed in this case.

SUMMARY

According to Christopher Dede [1996], a leading distance learning theorist, it is critical, with regard to online learning, to create "knowledge webs" which enable distributed access to experts, archival resources, authentic environments, and shared investigations. Creating this type of web also facilitates socialization, active participation, and collaboration within the framework of the online class. These are characteristics on which professors can build in setting up their own online courses and programs of study.

BIBLIOGRAPHY

Berge, Zane L. "Computer-Mediated Communication and the On-Line Classroom in Distance Education: From Marks in the Sand to Computer Conferencing Via

Fiber Optics." http://sunsite.unc.edu/horizon/mono/CD/Technological_Tools/Berge.html

Boettcher, Judith V. "Communicating in the Tower of WWWeb-ble." Syllabus, Vol. 11, no. 3, October 1997.

Dede, Chris. "The Evolution of Distance Education: Emerging Technologies and Distributed Learning." The American Journal of Distance Education, Vol. 10, No. 2, 1996.

McCollum, Kelly. "In Test, Students Taught On Line Outdo Those Taught in Class." The Chronicle of Higher Education, February 21, 1997.

Ryder, Martin and Wilson, Brent. "From Local to Virtual Learning Environments: Making the Connection." http://www.cudenver.edu/~mryder/aera95.html

The Chronicle of Higher Education. "U. of Colorado at Denver Creates Electronic Student Union." January 31, 1997.

FIN620
FINANCIAL MARKETS
COLLEGE OF BUSINESS
MOREHEAD STATE UNIVERSITY

Professor Rosemary Carlson
Computer-supported collaborative learning

THE WEB OF KNOWLEDGE

http://www.courseinfo.com/courses/Fin620

- **All administrative course documents are available to the student under Course Documents and Course Information including the syllabus and class schedule as well as material on using the Internet.**
- **All classroom lectures are found under Course Documents.**
- **Students may utilize Web hyperlinks found under External Links to increase their understanding of each lecture. This facilitates active learning on the part of the student.**
- **Discussions are carried on under Communications/Discussion Board that link to the classroom lectures.**
- **Students are assigned Group Projects for which they use the "area" under Student Tools for collaboration.**
- **The students can communicate with each other and with the instructor through the Class Listserv, the Virtual Chat Room, and the Discussion Boards as well as private email.**
- **Announcements may be posted by the instructor to keep all students up to date on course events.**
- **Students must utilize the information on the Web in order to complete their Term Projects.**

Comment: Chris Dede, a leading distance learning theorist, states that "creating knowledge webs which enable distributed access to experts, archival resources, authentic environments, and shared investigations...is critical in guiding effective learning with multimedia/hypermedia applications."

Fin620
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STATISTICAL ANALYSIS OF WEBSITE USAGE

http://www.courseinfo.com/courses/Fin620

- **3,098 "HITS" since August 12, 1997**
- **An average of over 100 hits per student enrolled in the class (17)**
- **2nd peak traffic time: 10 p.m.**
- **Off-hours traffic (9 p.m. - 8 a.m.) - 25.72% of total traffic**
- **Off-days traffic (weekends) - 13% of total traffic**

Comment: According to the distance learning literature, the reason that online courses are desirable and successful is, for one, because the online course can be asynchronous. In other words, the students and instructor don't have to be in the same place (a classroom, for example) at the same time (an appointed course time). In this course, the second peak usage time for the course site is 10 p.m.! In addition, 13% of course site usage occurs on the weekends and over one-quarter of course site usage occurs during "off-hours" - hours in which traditional classes would not usually be taught. The course site, however, does allow for interaction between students or between students and the instructor through the virtual chat room is such interaction is desired.

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Statistical Traffic Analysis for *CoursePage*
3098 Hits Recorded

10:47 pm Local Time

✓ Pages Dates Times Links Countries Visitors Browsers

View Selected Statistics

Hits	%	Web Page URL Analysis	Filter / Go
829	26.7%	Main_Page	
500	16.1%	Communication	
449	14.4%	Discussion_Groups	
351	11.3%	Course_Assignments	
308	9.94%	Course_Information	
295	9.52%	Course_Documents	
186	6.00%	Staff_Information	
160	5.16%	External_Links	
17	0.54%	Index_Noframes	
3	0.09%	Old_Announcements	

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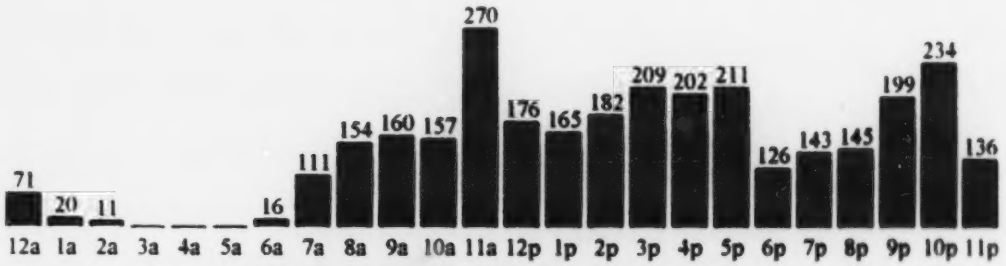
10:45 pm Local Time

Pages ☐ Dates ☑ Times ☐ Links ☐ Countries ☐ Visitors ☐ Browsers

View Selected Statistics

by Hour of the Day



3098 Current Hits Displayed Along Top.
Graphical Representation for Comparison Only and is Not Displayed to Exact Scale

Denotes Normal/Below Average Traffic - Denotes Above Average Traffic
Average traffic comparison for each hour accurately computed but not shown to exact scale from hour to hour

Hour	Hits	%	Hour	Hits	%	Hour	Hits	%
12:00am	71	2.29%	08:00am	154	4.97%	04:00pm	202	6.52%
01:00am	20	0.64%	09:00am	160	5.16%	05:00pm	211	6.81%
02:00am	11	0.35%	10:00am	157	5.06%	06:00pm	126	4.06%
03:00am		0%	11:00am	270	8.71%	07:00pm	143	4.61%
04:00am		0%	12:00pm	176	5.68%	08:00pm	145	4.68%
05:00am		0%	01:00pm	165	5.32%	09:00pm	199	6.42%
06:00am	16	0.51%	02:00pm	182	5.87%	10:00pm	234	7.55%
07:00am	111	3.58%	03:00pm	209	6.74%	11:00pm	136	4.38%

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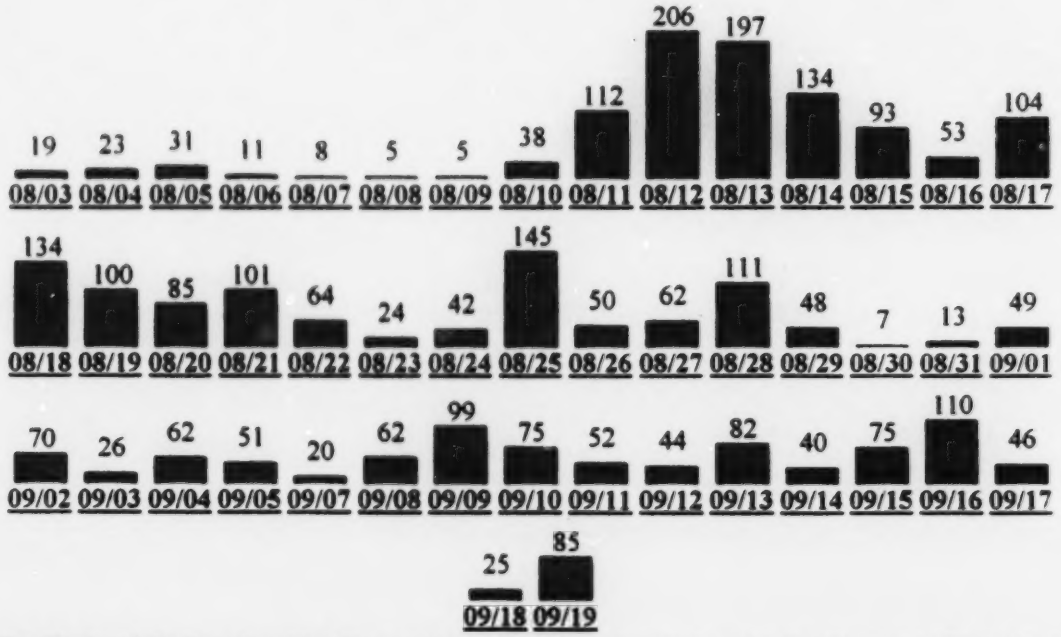
Pages ✔ Dates Times Links Countries Visitors Browsers

View Selected Statistics

by Day of the Month



(Hits Displayed On Top. Graphical Representation for Comparison Only and is Not Displayed to Exact Scale)

Denotes Normal/Below Average Traffic - Denotes Above Average Traffic
(Average traffic comparison for each day accurately computed but not shown to exact scale from day to day)

by Day of the Week

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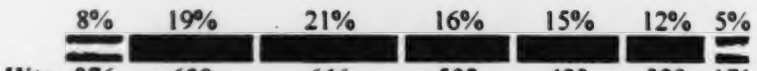

Hits for	276 Sun	600 Mon	666 Tue	502 Wed	493 Thu	390 Fri	171 Sat

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X	Author	# of Messages	Message #'s
	Ann Maggard	7	13 14 60 29 39 40 84
	Gary Crawford	7	58 59 21 34 37 109 86
	Jeff Brandt	1	68
	Jeff West	5	52 53 55 64 65
	Jennifer Worley	5	50 4 33 103 81
	Jeri McNamee	6	54 91 5 35 77 113
	Jerry Purvis	3	87 88 89
	Joe Carroll	2	11 27
	John C. Marcum	6	19 92 94 67 32 106
	Laura Stull	10	56 93 99 26 76 101 105 47 49 111
	Marybeth Purvis	1	66
	Mike Keith	8	7 8 79 107 108 41 82 83
	Paul A. Dolloff	3	51 57 28
	Robert Tolliver	2	22 30
	Rosemary Carlson	17	10 15 16 23 24 25 63 2 3 6 9 31 36 102 43 80 44
	Stephen Ricker	4	20 62 38 46
	Steve	1	78
	amaggard	1	1
	jbrandt	2	42 48
	jeff brandt	2	98 104
	marybeth	2	17 45
	marybeth purvis	2	12 18
	nelson maynard	12	95 96 61 69 70 71 72 73 74 75 85 110
	steve	4	90 97 100 112